




Faculty Profile on University Website

www.mjpru.ac.in

Title	Dr.	First Name	Mukul Kumar	Last Name	Gupta	
Designation		Associate Professor				
Department		Electronics and Instrumentation Engineering				
Address	Campus	Department of Electronics and Instrumentation Engineering, FET, MJP Rohilkhand University, Bareilly, Uttar Pradesh				
	Residence	352/2, Lane No 22, Golden Green Park, Bareilly				
Mobile No.		9639977496				
Email ID		Personal	mukulvjti@gmail.com			
		University Domain	mukul.ei@mjpru.ac.in			
Professional Networking ID, i.e. LinkedIn, Twitter etc.		https://www.linkedin.com/in/dr-mukul-kumar-gupta-72a4271a/ https://twitter.com/DrMukulKGupta				
Educational Qualifications (Graduation Onwards)						
Course/Degree		Institution		Year	Details/Thesis Topic/Subjects	
B. Tech		U.P.T.U. Lucknow		2006	Electronics and Instrumentation Engineering	
M. Tech		V.J.T.I. Mumbai		2008	Control System	
Ph.D.		UPES Dehradun		2015	Design and Modeling of Nonlinear Dynamical System	
Career Profile						
Organization / Institution		Designation		Duration	Nature of Duties	
MJP Rohilkhand University		Associate Professor		June 2023 – Till date	Academic	
UPES Dehradun		Assistant Professor (Selection Grade)		Jan 2018 – May 2023	Academic	
UPES Dehradun		Assistant Professor (Senior Scale)		Jun 2014 – Dec 2017	Academic	
UPES Dehradun		Assistant Professor		Dec 2009 – Jun 2014	Academic	
DIT Dehradun		Lecturer		July 2009 – Dec 2009	Academic	
DMCE Mumbai		Lecturer		Aug 2008 – May 2009	Academic	
Research Interests / Specialization						
Nonlinear Control, Robotics and Automation, Multiagent System, Intelligent Control						
Research Experience in Years - 15						
No of Research Scholars Successfully Guided						

Name of Programme		Awarded		Under Supervision					
Ph.D.		04		01					
M.Phil.		18 (M. Tech)		-					
Dissertation (M.Ed./M.A.)									
Researcher/ Expert ID	Scopus	Orchid	Publons	Vidwan	Google Scholar				
	<u>56136561700</u>	<u>0000-0001-8440-9599</u>	AAP-1665-2020	89861	<u>Nc1vHWAAAAA</u> J				
Teaching Experience (Subjects/Courses Taught) – 15 Years									
Signal and System, Modern Control System, Basic Electronics, Industrial Instrumentation, Robotics Based Control, Sensor and Instrumentation, Process Control									
Honours / Awards & Fellowship FOR OUTSTANDING WORK									
Name of Award/ Fellowship		Awarded By							
		Name of Governmental Agency	Name of Government Supported Organization/ Department		Name of International Recognized Body				
GATE Scholarship (2 years)		MHRD		MHRD					
Publications /Academic Activities (Numbers Only)									
Books & Monographs (Single Author)		Research Papers Published in International Journals	25	Papers Presented in Seminars/ Conferences	14	Seminars/ Conferences Organized		Research Projects (Completed)	
Books (Co-authored)		Research Papers Published in Other Journals		Seminar/ Conferences Attended	03	Workshops Organized	03	Research Projects (Ongoing)	
Books (Edited)		Articles Published in Popular Fora, e.g., Websites,		Sessions Chaired in Seminars/ Conferences	01	Members hip of Academic / Professio		Foreign Countries Visited for Academic	
Chapters in Edited	04								

Books		Blogs, Newspapers, Magazines etc.		Resource Lectures Delivered	01	nal Bodies		Assignme nts	
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Details of Publications /Academic Activities (2010 Onwards)					
(a) Authored Books/ Monographs					
Name of Book		Year of Publication		Publisher	
ISBN No					
(b) Edited Books					
Year of Publication		Title		Publisher	
ISBN		DOI No.		Citations	
(c) Papers Published in UGC Care Listed /Indexed/ Peer Reviewed Journals					
Year of Publication		Title		Name of Journal	
ISSN No		Citations		Impact Factor	
2023		Trajectory Control of Robotic Manipulator using Metaheuristic Algorithms		International Journal of Mathematical, Engineering and Management Sciences	
2022		Intelligent Control of Robotic Manipulators: A Comprehensive Review		2366-3286 / scopus	
2022		Solar tree-based water pumping for assured irrigation in sustainable Indian agriculture environment		2352-5509 / SCI	
2022		Analysis of electronic clutch control unit for manual transmission vehicle oriented toward safety		2214-7853 / SCOPUS	
2021		Robust Control Based Stability Analysis and Trajectory of triple link Robot Manipulator		1269-6935 / SCOPUS	
2021		Renewable energy adoption: Design, development, and assessment of solar tree for the mountainous region		0363-907X / SCI	
2021		Frequency Based Estimation of Angular Velocity in Triple Pendulum		2369-0739 / SCOPUS	
2020		Design and Analysis of New Haptic Joysticks for		1050-0472 / SCI	

	Enhancing Operational Skills in Excavator Control	ASME			
2020	Developments and Clinical Evaluations of Robotic Exoskeleton Technology for Human Upper-Limb Rehabilitation	Advanced Robotics by Taylor and Francis	0169-1864 / SCI	26	2.05
2020	Performance estimation of computed torque control for surgical robot application	journal of Mechanical Engineering and Sciences	2231-8380 / scopus	10	
2019	Disturbance Observer-assisted Trajectory Tracking Control for Surgical Robot Manipulator	Journal Européen des Systèmes Automatisés	1269-6935 / scopus	5	
2019	Kinematic Dynamic Analysis and Control of 3 DOF Upper-limb Robotic Exoskeleton	Journal Européen des Systèmes Automatisés	1269-6935 / scopus	22	
2019	Disturbance observer-assisted hybrid control for autonomous manipulation in a robotic backhoe	Archive of Mechanical Engineering	0004-0738 / SCOPUS	8	
2019	Development and motion control of spatial serial robotic manipulator under varying disturbances	World Journal of Engineering	1708-5284 / scopus	3	
2019	Maximizing Lifetime of Barrier Coverage Wireless Sensor Network with Tell Neighbor Algorithm	International Journal of Mathematical, Engineering and Management Sciences	2455-7749 / scopus		
2019	3 D Multilayer Mesh NoC Communication and FPGA Synthesis	Wireless personal communication	0929-6212 / SCI	10	2,07
2018	Machine Learning Based Resource Utilization and Pre-estimation for Network on Chip (NoC) Communication	Wireless personal communication	2193-567X /SCI	30	2,07
2018	A Review on Forest Fire Detection Techniques: A Decadal Perspective	International Journal of Engineering &Technology	2227-524X	31	

2017	Pattern Similarity Score Based on One Dimensional Time Series Analysis	Journal of Pattern Recognition Research (JPRR)	2234-7593 / SCI	3	
2017	FM Receiver Design Using Programmable PLL	Wireless personal communication	0004-0738 / SCI	2	
2016	Visual Recurrence Analysis of Chaotic and Regular Motion of a multiple pendulum system	Arabian Journal for Science and Engineering	2231-8380 / scopus	6	2.8
2016	Advances in Floating Aerogenerators: Present Status and Future	International Journal of Precision Engineering and Manufacturing	1269-6935 / scopus	11	4.6
2015	Natural frequencies of multiple pendulum systems under free condition	Archive of Applied Mechanics	1269-6935 / scopus	13	2.4
2012	A New Method of Load- Flow Solution of Radial Distribution Networks	International Journal of Electronics and Communication Engineering	0974-2166	13	

(d) Chapter/Paper Published in Edited Books

Publication		Title of the Book	Title of the Chapter	Name & Address of Publisher	Year	ISB N	DOI	Citation Google/ web of science
National	International							
	International	Recent Trends and Best Practices in industry 4.0	Control of Mobile Manipulator with Object Detection for EOD Applications	River Publisher, IEEE	2023	9788770228046	https://doi.org/10.1201/978100341717	
	International	Internet of Things in Modern Computing	A next-gen IoT-based semi-automatic mobile manipulator	CRC Press, Taylor & Francis	2023	9781003407300	https://doi.org/10.1201/9781003407300	
	International	Intelligent	Machine Vision for	De gruyter	2023	978-3-11-	https://doi.org/10.1515/9783110417171	

		Decision Support Systems: Applications in Signal Processing	Human Machine Interaction using Hand Gesture Recognition			0621 10-5	i.org /10.1515/9783110621105	
	International	- Medical Big Data and Internet of Medical Things: Advances, Challenges, and Applications	IoT and Robotics in Healthcare Book Title - Medical Big Data and Internet of	CRC Press, Taylor & Francis	2023	9781 1384 9247 9	https://doi.org/10.1201/978131381351030380	

(e) Invited as Resource Lectures Person/Examiner/Expert

Resource person	Detail of Event	Title of Lecture	Date	Institution
Mukul Kumar Gupta	Invited as Guest Lecture	Essential Elements of Robotics	28/8/2023	MIT Moradabad

(f) Seminars/Conferences/Workshops Organized

Workshop Organized on the Topic MATLAB and Simulink for Engineers

(g) Projects (With Title, Year, Grants, Funding Agency and Collaborations)

Year	Name of Project	Funding Agency	Amount	Duration	
				From	Till

(h) Administrative Positions/Assignments Held

Post	Organization	Duration	
		From	To
MTech Automation and Robotics coordinator	UPES Dehradun	2017	2023
Department Training and Placement coordinator	MJP Rohilkhand University	June 2023	

(i) Seminar/Conference Presentations

1. Devendra Rawat, Mukul Kumar Gupta, Abhinav Sharma ,Optimum point trajectory tracking of a robotic manipulator system using Extremum Seeking control, International Conference on Intelligent Communication, Control and Devices , River Publisher , 2023
2. A. Raghuvanshi, A. Sharma and M. K. Gupta, "Maximum Likelihood Direction of Arrival Estimation using GWO Algorithm," 2022 *International Conference on Advances in Computing, Communication and*

Materials (ICACCM), Dehradun, India, 2022, pp. 1-5, doi: 10.1109/ICACCM56405.2022.10009124.

3. Vineeth Veeramalla, Jagriti Mishra, Meera C S, Varnita Verma, **Mukul Kumar Gupta** “Development and Gesture Control of Virtual Robotic Arm” paper presented in third international conference on Intelligent Communication, Control and Devices (ICICCD), 21st and 22nd December 2018
4. Varnita Verma, Piyush Goyal, Meera C.S, **Mukul kumar Gupta**, Piyush Chauhan “Virtual Simulation of Regulated Power Supply for Various Microcontroller Board and Their Peripherals” presented in third international conference on Intelligent Communication, Control and Devices (ICICCD) 21st and 22nd December 2018
5. Varnita Verma, **Mukul Kumar Gupta**, paper presented in third Advances in Robotics (AIR) at IIT Delhi, 02 July 2017 at doctoral symposium under the title “Smart Technique for Minimally Invasive Automatic Suturing Robot”
6. Akash Gupta, **Mukul Kumar Gupta**, paper presented in third Advances in Robotics (AIR) at IIT Delhi, 02 July 2017 at doctoral symposium under the title “Design and Analysis of Robotic Exoskeleton for Human Upper Limb Rehabilitation”
7. Meera C S, **Mukul Kumar Gupta**, paper presented in third Advances in Robotics (AIR) at IIT Delhi, 02 July 2017 at doctoral symposium under the title “Novel Approach towards safety in backhoe with haptics”
8. **Mukul Kumar Gupta**, Vinit Gupta, Arun K. Singh, “Linear and Non- Linear Dynamics of Double Pendula with Distributed Mass” presented in Sixth International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM) 29-31 Dec.2014 at IIT Kharagpur
9. **Mukul Kumar Gupta**, Bansal K., and Singh A.K. , “Stabilization of Triple Link Inverted Pendulum system based on LQR control Technique”, Presented IEEE International Conference ICRAIE at Jaipur during May 9-11,2014
10. **Mukul Kumar Gupta**, Bansal K., and Singh A.K. ,Paper presented in third international conference on Advances in control and Dynamical System (ACODS) at IIT Kanpur from March 13-15, 2014, under the title of Mass and Length Dependent Chaotic Behavior of a Double Pendulum, D.O.I. 10.3182/20140313-3-IN-3024.00071
11. Ms. Meera C S, P Swami Sairam, **Mukul Kumar Gupta** paper presented under the topic “Path Planning and Motion Control for a 3 DOF Massaging Robot” in IEEE International Conference on Robotics and Automation for Humanitarian Applications (RAHA) , Amrita University Kerela December 18-20 2016
12. Akash G, Vernita V, Adesh K, Paawan S, **Mukul Kumar Gupta**, Meera C S “Stabilization of Underactuated mechanical system using LQR Technique”,Proceedings of international conference on Intelligent Communication, Control and Devices (ICICCD) 2nd -3rd April 2016, Advances in Intelligent Systems and Computing, Springer, Vol. 479,pp(653-659)
13. Kapil S, Mayank R, Vivek K, Amit K Mondal, Abhishek S, **Mukul Kumar Gupta**, Design for Structured Uncertainty of mass spring system using robust control technique, Proceedings of international conference on Intelligent Communication, Control and Devices (ICICCD) 2016, Advances in Intelligent Systems and Computing, Springer, Vol. 479,pp(601-608)
14. Paawan S, **Mukul Kumar Gupta**, Amit K Mondal, Vivek Kaundal, “HAAR like feature based Car key detection using Cascade Classifier” Proceedings of international conference on Intelligent Communication, Control and Devices (ICICCD) 2016, Advances in Intelligent Systems and Computing, Springer, Vol. 479,pp(689-694)

<p>15. Vinay Chowdary, Mukul Kumar Gupta, Automatic Forest Fire Detection and Monitoring Techniques: A Survey published in <i>Intelligent Communication, Control and Devices. Advances in Intelligent Systems and Computing</i>, vol 624. Springer, Pg. 1111-1117, (2018), doi: https://doi.org/10.1007/978-981-10-5903-2_116.</p> <p>16. Arpit Jain, Mukul kumar Gupta, “Speed regulation of a non-linear Separately Excited DC Motor using optimized Fuzzy Logic Control” presented in international conference on Intelligent Communication, Control and Devices (ICICCD), 15-16 April 2017</p>			
(j) Memberships of Academic/Professional Bodies			
(k) Participation in Community Service / Exchange Programme / Consulting Activity			
(l) International Academic Exposure			
(m) Any Other Details			
AIR 289 in GATE			

Mukul Kumar Gupta
Signature of Faculty Member